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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,277

06/01/2006

Maurice William Slack

32361-267

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12/19/2008

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EXAMINER

KOEHLER, CHRISTOPHER M

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

12/19/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/528,277	<b>Applicant(s)</b> SLACK, MAURICE WILLIAM	
	<b>Examiner</b> Christopher M. Koehler	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 1-11, 26 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-25 and 27-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/9/08, 9/1/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of claims 12-25 and 27-39 in the reply filed on 10/9/2008 is acknowledged.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 20 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 20 recites the limitation "the tubular workspace" in line 2 of the claim.  
There is insufficient antecedent basis for this limitation in the claim.

5. Claim 28 recites the limitation "the tubular workspace" in line 2 of the claim.  
There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 12-20, 21, ~~24~~, 25, 27-29, 31-36 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Hollerith et al. (US Patent No. 349,718).

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Claim 12:

Hollerith teaches a method for producing a complex shape hollow tubular part comprising placing a length of metal tubular workpiece having a side wall and a central opening (figure 1), inside a confining surface comprised of mold elements (D), the mold elements including cavities spaced and shaped in the configuration of desired side wall ribs (figure 2), the mold elements being supported substantially against expansion radially outward from their position about the tubular work piece (F); applying sufficient pressure to the side wall through the inner bore to force the tubular sidewall radially outward against the confining surface and into the mold cavities to plastically deform the side wall to form the desired side wall ribs (figure 2); and removing the work piece from the confining surface.

Claims 13 and 14:

Hollerith teaches that the pressure is fluid pressure comprising either water or some other incompressible fluid (page 2, lines 55-58).

Claims 15-19 and 24:

Hollerith teaches that the mold elements (D) are cylindrical (figure 9) and contain slits (horizontal break in figure 9) to permit expansion and removal thereof, wherein the mold elements abut circumferentially at adjacent ends (figure 2) to form the confining surface such that each mold element defines a portion of a cavity (figure 2).

Claims 20 and 28 (as best understood):

Hollerith teaches that the step of placing includes inserting a mandrel (B) into the central opening of the tubular workpiece (g', h') such that a space is formed between the mandrel and the side wall, sealing about the space and positioning the tubular work

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piece in the confining space and the mold elements to form a part having ribs protruding outwardly from its outer surface (figures 1 and 2); and removing the part from the mold elements.

Claim 21:

Hollerith teaches that the side wall ribs are of substantially uniform thickness (page 1, lines 66-82).

Claim 25:

Hollerith teaches that the ribs are formed to protrude smoothly from the sidewall cylindrical outer surface (figure 2).

Claims 27, 29-32, 34-36 and 39:

See rejections of claims 12-21, 24 and 25 above.

Claim 33:

Hollerith teaches that the mold elements are separable from each other by way of a circumferential split (figure 1).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 22 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollerith et al. in view of Kirk et al. (US 2003/0010540).

Claims 22 and 37:

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Hollerith teaches the structure above but fails to teach coating the inner surface once the part has been removed from the confining surface.

Kirk teaches applying a low friction coating to the inner surface of a centralizer (paragraph [0023]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply a low friction coating to the interior of a centralizer so that it can rotate and slide freely on the casing (Kirk paragraph [0039]).

10. Claims 23 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollerith et al. in view of Williamson et al. (US Patent No. 6,092,593).

Claims 23 and 38:

Hollerith teaches the structure above but fails to teach treating the ribs for wear resistance after removal from the confining surface.

Williamson teaches spray-welding a wear coating onto an external surface of centralizer ribs (col. 8, lines 15-17).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply a wear coating to the ribs so that they can resist wear caused by down hole use (Williamson col. 8, lines 15-17).

**Conclusion**

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571)272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

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12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jermie E. Cozart/  
Primary Examiner, Art Unit 3726

/C. M. K./  
Examiner, Art Unit 3726